Application No. 10/710,494 Response dated May 21, 2007

Reply to Office Action of March 1, 2007

CLAIMS LISTING

1. (currently amended) A method for suppressing an explosion in a fuel tank, comprising: installing into the tank a reticulated polyurethane foam having a density less than 1.0 pounds per cubic foot [16 kg/m³], and having a volume electrical resistivity of less than 10¹² ohm-cm at 70°F [21.1°C], wherein one or more antistatic agents is added to a foamforming mixture used to prepare the reticulated polyurethane foam, such antistatic agents being selected from the group consisting of: quarternary ammonium compounds, quarternary ammonium salts of alkyl sulfuric acid and carboxylic acid, metallic salts of lithium, sodium, potassium, ammonium, calcium and barium, complexes of metallic salts with polyhydric alcohols and their derivatives, such as 1,4 butanediol, ethylene glycol, propylene glycol and polyethylene glycol, complexes of metallic salts with mono-ols, such as ethylene glycol monomethyl ether and ethylene glycol monoethyle ether, hexahalogentated ionic compounds, hexahalogentated phosphate compounds, potassium hexafluorophosphate, sodium hexafluorophosphate, ammonium hexafluorophosphate, and carbon black.

Docket No.: 00124-01080-US

- 2. (original) The method of claim 1, wherein the polyurethane foam has a density of from 0.6 to 0.9 pounds per cubic foot [9.6 to 14.4 kg/m³].
- 3. (cancelled)
- 4. (original) The method of claim 1, wherein the polyurethane foam is reticulated by thermal reticulation.
- 5. (original) The method of claim 1, wherein the tank has an inner volume and the foam fills from 50 to 90% of the inner volume of the tank.

540037-1

Docket No.: 00124-01080-US Application No. 10/710,494 Response dated May 21, 2007

Reply to Office Action of March 1, 2007

(original) The method of claim 1, wherein the fuel tank is an aircraft fuel tank. 6.

7. (withdrawn) A three dimensional structure for use as an explosion suppressing material in

a fuel tank,

comprising:

a reticulated polyurethane foam prepared by (i) reacting at least one polyester or

polyether polyol or a mixture of such polyols and at least one isocyanate compound under

foaming conditions to produce a polyurethane foam having a density less than 1.0 pounds

per cubic foot [16 kg/m³], and (ii) reticulating said polyurethane foam.

(withdrawn) The structure of claim 7, wherein the polyurethane foam has a density of

from 0.6 to 0.9 pounds per cubic foot [9.6 to 14.4 kg/m³].

9. (withdrawn) The structure of claim 7, wherein one or more antistatic agents are added

when the polyurethane foam is formed, and the polyurethane foam has a volume electrical

resistivity of less than 10¹² ohm-cm at 70°F [21.1°C].

10. (withdrawn) The structure of claim 7, wherein the polyurethane foam is reticulated by

thermal reticulation.

8.

11. (withdrawn) The structure of claim 7, wherein the polyurethane foam is formed under

vacuum foaming conditions.

12. (cancelled)

13. (currently amended) The method of claim [12] 1, wherein the antistatic agents is/are

metallic salts.

14. (currently amended) The method of claim [42] 1, wherein the antistatic agents is/are

added in amounts from 0.1 to 20 parts per hundred parts polyol.

540037-1

3

Application No. 10/710,494 Response dated May 21, 2007 Reply to Office Action of March 1, 2007

15. (new) The method of claim 1, wherein the foam-forming mixture used to prepare the reticulated polyurethane foam is foamed under controlled vacuum conditions from 0.6 to 0.95 bar (absolute).

Docket No.: 00124-01080-US